

CLAIMS:

1. A silica glass substrate obtained by polishing,
cleaning, drying and etching a silica glass substrate slice,
5 said substrate having a pair of major surfaces and a
thickness therebetween, in which when the substrate is
treated with a reactive reagent, defects having a size of at
least 0.3 μm in a direction parallel to the substrate major
surface are absent on the substrate surface.

10

2. The silica glass substrate of claim 1 wherein in the
etching step, the silica glass substrate slice is etched
away in an amount of 0.2 to 0.5 μm in a thickness direction
thereof.

15

3. The silica glass substrate of claim 1 wherein the
reactive reagent is an acidic or alkaline reagent.

20

4. A method for selecting silica glass substrates,
comprising the steps of polishing, cleaning, drying and
etching silica glass substrate slices to form silica glass
substrates, and inspecting the substrates for surface
defects, thereby selecting those substrates on a surface of
which defects having a size of at least 0.3 μm in a
25 direction parallel to the substrate major surface are
absent.